ANGRAECUM SCALE, CONCHASPIS ANGRAECI COCKERELL (HOMOPTERA: COCCOIDEA: CONCHASPIDIDAE)¹

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<u>INTRODUCTION</u>: Conchaspis angraeci Cockerell was described on Angraecum eburneum var. virens from Jamaica (Cockerell 1893). This is the only species of Conchaspis which occurs in North America. Apparently, no life history studies have been carried out on any species in the family Conchaspididae.

HABIT: Occurs on the stems and leaves. Externally the armor is very similar to an armored scale insect, but there is no exuviae (cast skins of previous instars) incorporated into the armor. The female armor (fig. 1) usually is circular in outline and conical in shape. The cone has 6 to 8 ridges (fig. 2) radiating from the blunt apex but ending before reaching the margin. The armor is normally white, but sometimes the color is obscured by dirt or plant tissue that makes it appear gray or yellowish. First instars or crawlers do not have a wax cover. The wax cover is secreted by the 2nd instar and adult female.

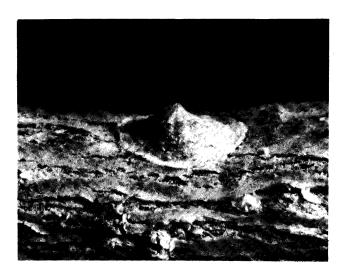


Fig. 1. Conchaspis angraeci, adult female (x15)



Fig. 2. Conchaspis angraeci, nymph with distinct ridges on armor (x20)

<u>DISTRIBUTION</u>: This scale insect is found throughout the tropics and subtropics. In Florida it has been reported from the following counties: Alachua, Baker, Brevard, Broward, Charlotte, Citrus, Dade, De Soto, Hillsborough, Jefferson, Lake, Lee, Leon, Levy, Manatee, Martin, Monroe, Orange, Palm Beach, Pinellas, Polk, and Volusia.

HOSTS: Acalypha sp., Acalypha wilkesiana Müll. Arg., Angraecum superbum Thouars. var. virens Hort. Veitch, Bougainvillea sp., Brassaia sp., Brassaia actinophylla Endl., Carica papaya L., Cattleya sp., Chrysobalanus icaco L., Coccoloba diversifolia Jacq., Coccoloba uvifera (L.)L., Codiaeum variegatum (L.) Blume, Epidendrum secundum Jacq.,

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Euphorbia lactea Haw.cv.'Cristata', Flacourtia indica (Burm. f.)Merrill, Ficus sagittata Vahl, Gongora quinquenervis Ruiz & Pavon, Hibiscus sp., Hibiscus rcsa-sinensis L., Hibiscus rosa-sinensis L. 'Mary Ann', Hoya carnosa R. Br., Ilex sp., Ixora sp., Kigelia pinnata DC., Macroplectrum sesquipedale (Thouars)Pfitz., Malvaviscus sp., Myrica cerifera L., Nectandra coriacea (Sw.) Griseb., Oncidium ampliatum Lindl., Oncidium stipitatum Lindl., Persea sp., Pittosporum sp., Pittosporum tobira Ait., Pittosporum tobira Ait. var. variegatum Hort., Plumeria sp., Rhododendron sp., Stephanotis sp.

ECONOMIC IMPORTANCE: Damage, sometimes severe, has been reported on hibiscus, pittosporum, orchids, and seagrape. Damage appears as a general plant weakening because of the removal of large quantities of plant sap.

CONTROL: No chemicals are registered for use on this pest; however, one of the chemicals recommended by the Institute of Food and Agricultural Sciences, University of Florida, for the control of scale insects would be adequate. The best time to spray is when the crawlers are present, because they do not have a wax armor over them. If Chemicals are applied to adult females, 3 or 4 applications will be needed for control.

REFERENCES:

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Mamet, R. 1954. A monograph of the Conchaspididae Green (Hemiptera:Coccoidea). Trans. Roy. Ent. Soc. London 105(2):198-239; 24 fig.